19990128.ba v02_n402.bam.990128 v02_n403.bam.990128

>From ???@??? Thu Jan 28 04:54:57 1999
Message-Id: <199901280813.CAA08674@sco.theporch.com>
Date: Thu, 28 Jan 1999 02:12:31 CST
From: Old Tube Radios <boatanchors@theporch.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: BOATANCHORS digest 2402

BOATANCHORS Digest 2402

Topics covered in this issue include:

1) TM-217
   by William Donzelli <william@ans.net>
2) Re: SLRM (was SB610 xfmr)
   by Bob Roehrig <broehrig@admin.aurora.edu>
3) WANTED: C-390C Tuning Coil (5.7- 8,0 MHz) for BC-610 Xmtr
   by AviDov@aol.com
4) Wanted / Trade
   by Glenn Finerman <glennfin@mjet.com>
5) Re: 120/240 TRANSFORMERS
   by John M Iverson <jackiv@juno.com>
6) Ranger Instability
   by Dan Martin <dmartin@visuallink.com>
7) HP Manual
   by "ROBERT W. DOWNS" <RWDowns_WA5CAB@compuserve.com>
8) HP plug ins for sale, CHEAP!!
   by zeitler@ibm.net
9) RBO
   by Tom Smith <tsmith@hal-pc.org>
10) E. H. Scott SLRM info needed
   by WF2U <mbendror@villagenet.com>
11) Nuvistor Question
   by Steve Berg <z931086@corn.cso.niu.edu>
12) Randy Zelnick, Where is
   by "Spencer Petri" <spetri@e-tex.com>
13) Re: E. H. Scott SLRM info needed
   by Al Klase <skywaves@bw.webex.net>
14) HMS Tyler
   by hikrbikr@erols.com
15) 600 Meters- Where's the Surplus?
   by David Stinson <arc5@ix.netcom.com>
16) Battery on Concrete?
   by Jerry Proc <jproc@idirect.com>
17) Re: The 600m Liberation Army (SMLA) (fwd)
   by Sandy W5TVW <ebjr@worldnet.att.net>
18) Re: Battery on Concrete?

by John M Iverson <jackiv@juno.com>
19) Re: Battery on Concrete?
by John R Bookout K7JB <k7jb@uswest.net>
20) Re: Battery on Concrete?
by Bill Hawkins <bill@iaxs.net>
21) Triad PR21AL plate xmfr?
by zeitler@ibm.net
22) Re: SLRM (was SB610 xfmr)
by "Arden Allen" <gumbear@pacbell.net>

Date: Wed, 27 Jan 1999 12:05:11 -0500 (EST)
From: William Donzelli <william@ans.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: TM-217
Message-Id: <Pine.GSO.3.96.990127120342.25102Q-100000@titan.purch.ans.net>
Mime-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

I found a NIB Signal Corps TM-217 terminal box the other day in my stuff.
Does anyone need it? Any Navy little junk for trades?

William Donzelli
william@ans.net

Date: Wed, 27 Jan 1999 14:22:04 -0600 (CST)
From: Bob Roehrig <broehrig@admin.aurora.edu>
To: Old Tube Radios <boatanchors@theporch.com>
cc: boatanchors@theporch.com
Subject: Re: SLRM (was SB610 xfmr)
Message-ID: <Pine.ULT.3.96.990127141940.22506A-100000@admin.aurora.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Wed, 27 Jan 1999, Ken Kinderman wrote:

>......... The tipoff seems to be the .1's
> from both sides of the line to chassis. That's getting close the ragged
> edge when it comes to current leakage large enough to be felt. Maybe
> reducing them to .01 would be a good move.

OK - well if that's the case, I would indeed replace the .1's with
something smaller, then use a grounded cord. If that's done. I really
don't see the need for an isolation xfmr.

"Nostalgia is a thing of the past"

E-mail broehrig@admin.aurora.edu 73 de Bob, K9EUI
CIS: Data / Telecom Aurora University, Aurora, IL
630-844-4898 Fax 630-844-5530

From: AviDov@aol.com
Message-ID: <96e0c6be.36af86e4@aol.com>
Date: Wed, 27 Jan 1999 16:36:36 EST
To: Old Tube Radios <boatanchors@theporch.com>
Mime-Version: 1.0
Subject: WANTED: C-390C Tuning Coil (5.7- 8,0 MHz) for BC-610 Xmtr
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

Need a nice & clean C-390C variable tuning coil for a display,NOS preferred..
Swap or Cash OK.

Message-Id: <199901272258.QAA04496@sco.theporch.com>
Date: Wed, 27 Jan 1999 18:03:51 -0500
To: Old Tube Radios <boatanchors@theporch.com>
From: Glenn Finerman <glennfin@mjet.com>
Subject: Wanted / Trade
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

I am looking for any of the following Drake gear;

R4, R-4A, R-4B, R-4C, SPR-4, SW-4A, SW-4,
T-4X, T-4XB, T4X-C, 2-C, TR-6

I have the following items to offer in trade (or will buy outright)

Navy RBM receiver twins with matching AC supply
Collins 32V-2
RCA SRR-11 Receiver
Heath MT-1 "Cheyenne"
Collins ART-13
McKay Dymek DR-55 receiver
R-1051 receiver
R-390A receiver(needs restoration)

73........Glenn Finerman K2KL

glennfin@mjet.com

To: Old Tube Radios <boatanchors@theporch.com>
Cc: boatanchors@theporch.com, hallicrafters@qth.net
Date: Wed, 27 Jan 1999 16:55:28 CST
Subject: Re: 120/240 TRANSFORMERS
Message-ID: <19990127.165536.3502.2.jackiv@juno.com>
From: John M Iverson <jackiv@juno.com>

Jack Iverson   K0EWU   jackiv@juno.com
ARRL, IEEE LM, RCA, AMI, ARCI, QCWA

On Mon, 25 Jan 1999 11:00:42 CST John M Iverson <jackiv@juno.com> writes:
>an excellent source for transformers can be a local machinery
>rebuilder or a scrap yard dealing in factory demolitions. units with
>120/240 or 240/480 primaries can be used for isolation. connect the
>pri and sec to the same voltage and you have a good trans.. these are
>rated in kva which is kilovolt amps.   they show up with ratings such
>as .25 kva, .5kva, 1.0 kva etc. when you are lucky you can find a
>large "control" trans former with 12/24 volt secondaries and 120/240
>pri. in the 120/240 primary one can get 6/ 12/ or 24 volts from the
>secondary which can be phased to be in a buck or boost configuration.
> a .25 kva unit is good for 10 amps at the 24 connection or 21 amps
>in the 12 vol setting.   i hope this helps. remember, for safety,
>ground the tx frame. helps in noise reduction too.   old jack
>Jack Iverson   K0EWU   jackiv@juno.com
>ARRL, IEEE LM, RCA, AMI, ARCI, QCWA
>____
>You don't need to buy Internet access to use free Internet e-mail. Get
>completely free e-mail from Juno at http://www.juno.com/getjuno.html
>or call Juno at (800) 654-JUNO [654-5866]

____
You don't need to buy Internet access to use free Internet e-mail.
Get completely free e-mail from Juno at http://www.juno.com/getjuno.html
or call Juno at (800) 654-JUNO [654-5866]

Message-ID: <36D89376.7D22@visuallink.com>
Date: Sat, 27 Feb 1999 19:53:10 -0500
From: Dan Martin <dmartin@visuallink.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Ranger Instability
Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

Hi, folks:

Well, a number of you have been individually helpful over the last couple of weeks regarding my Ranger work but it is time for a summary and some collective wisdom. My original posting described long term, but marked VFO drift and some sudden bouts of instability characterized by jumps in frequency (a "snap roll" in CW tone) as monitored on a receiver. I have done some work, a little aimed at the original problem, and some just prudent things to do while the patient was opened up. I've replaced the VFO screen dropping resistor with a 3 watter and put it beneath the chassis. I Deoxit-ed all the variable cap wipers and bearing surfaces. Found no apparent bad grounds, i.e., poor looking solder joints, etc., in the VFO area. I also replaced all the original paper tubulars throughout with modern metallized poly tubulars. All electrolytics, including C77, the large HV supply bypass, are new. New tubes include the 6AU6 VFO, the OA2 VR for the VFO, the 12AU7 keyer and 6AL5 bias rectifier. The VFO is calibrated using the trimmers and an AC coupled hand held freq. counter. All work was done carefully and well (and it was fun). But ... I still get slight, though much less than before drift on 40-10 meters, and still some occasional but remarkable freq. jumps on the monitored CW. Notably, I think, 160 and 80 meter freqs are stable, pure, with no instability or freq jumps - really nice here. I *can* at least enjoy 3580! As many of you know, the EFJ VFO uses two tank circuits. One at 1.75 to 2.0 mhz for 160 and 80 and a second, at 7.0 to 7.425 mhz for 40 through 10. Questions:

1. Are Rangers known for problematic VFO's or is mine exceptional? (I believe my trouble is very atypical - and fixable)
2. Given the perfect performance on 160 and 80 it seems likely the problem could be in the 7.0 to 7.425 VFO output tank. Possible? Where to check within that circuitry? Likely suspects?
3. Any more general pointers?

I'm nearly there. The rig loads beautifully. CW note on 80 is great. Voltages seem OK. The PA plate sags a bit from no load to load (i.e., 580-590V or so resting to 510v key down, using an HP VTVM) but I think that is typical.

Thanks for any comments, public or private.

Dan
WB4GRA
Winchester, VA

Date: Wed, 27 Jan 1999 20:14:05 -0500

From: "ROBERT W. DOWNS" <RWDowns_WA5CAB@compuserve.com>
Subject: HP Manual
To: Old Tube Radios <boatanchors@theporch.com>
Message-ID: <199901272014_MC2-684D-41EC@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: quoted-printable
Content-Type: text/plain; charset=ISO-8859-1
Content-Disposition: inline

Group,

Someone on here was looking for an HP manual a few days ago and I couldin=
't
find it in my database. I was just up in the attic looking for something=

else that I didn't find and came across T.O. 33A1-12-349-1 which covers
Model 400D and Model 400H.   If either of those was what you were looking=

for, I can copy mine. If not, please forgive the bandwidth.

73,
Robert Downs
WA5CAB
Houston, TX

From: zeitler@ibm.net
Message-ID: <003701be4a5d$2b466440$12292581@km3g>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: HP plug ins for sale, CHEAP!!
Date: Wed, 27 Jan 1999 17:25:50 -0800
MIME-Version: 1.0
Content-Type: text/plain;
     charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Gents,
I have the following HP plug ins for sale:

model 1402A dual trace amplifier

model 1420A time base

both work but may need some fine tuning to be really exact. Good for parts
units for your big old HP scope. $15.00 for both. You pay shipping from San
Diego 92139

Lane

ku7i

Eventually I will get to the end of this six year collection pile of stuff!!

Message-ID: <36AF6906.20B2A4C3@hal-pc.org>
Date: Wed, 27 Jan 1999 19:29:10 +0000
From: Tom Smith <tsmith@hal-pc.org>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: RBO
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

The recent posting about the EH Scott RBO by Robert was deleted by mistake in my attempt to avoid overposting. Anyway, The RBO was a WW2 moral receiver commonly found in the galleys and other suitable places on Navy vessels of semi-mass destruction.
Freq. range .54-1.6 & 5.55-15.6 MCS. They were115 vac 60 cy receivers that used a 9 tube lineup including a 6E5 tuning indicator, 6K6 audio amp and a pair of 6X5s for rectifiers. It had slide rule dial and could also be used as a audio amplifier for phono play through the shipboard speaker system. Neat, well built receiver that sounds really good.

I'm not sure who wanted the information so I apologize for the bandwidth, but if you need more, drop me a email.

By the way, the modulation transformers and R-390-A rf carcass is going to better homes.

Thanks! Tom N5AMA

Message-Id: <4.1.19990127210601.011616a0@villagenet.com>
Date: Wed, 27 Jan 1999 21:15:34 -0500
To: Old Tube Radios <boatanchors@theporch.com>
From: WF2U <mbendror@villagenet.com>
Subject: E. H. Scott SLRM info needed
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Greetings to all,

The initial visual inspection of my newly acquired SLRM revealed that the dial lamp is burned out. Since I don't have the manual yet, I don't know which tube filament string it's part of, the receiver being a transformerless AC/DC set. I also need the lamp specs (lamp No. and/or voltage and current rating.)

I'd also like to know where I can get a manual copy for the radio (I checked the on-line catalogs of the well known manual vendors and none of them had the SLRM on the list).

I'd appreciate any info

Thanks.
73's from   Meir, WF2U

Collector and user of vintage amateur and military radio equipment.
Collector and user of vintage horse/cavalry equipment. "Boots and Saddles!"

"Boatanchors forever!"

E-mail address: <mailto:mbendror@villagenet.com>mbendror@villagenet.com
Webpage: http://www.qsl.net/wf2u

Message-ID: <36AFCCEA.614E59C8@corn.cso.niu.edu>
Date: Wed, 27 Jan 1999 20:35:22 -0600
From: Steve Berg <z931086@corn.cso.niu.edu>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Nuvistor Question
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I recently ordered some spare nuvistors for my 2 meter transverter. I asked for 6CW4 tubes, and they sent me 6DS4 tubes. Are these a close enough equivalent to work well in a cascode receiver front end?

73,

Steve WA9JML

Message-ID: <000101be4a7a$d06e2ee0$e12519ce@enduser>
From: "Spencer Petri" <spetri@e-tex.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Randy Zelnick, Where is
Date: Wed, 27 Jan 1999 20:58:12 -0800
MIME-Version: 1.0
Content-Type: text/plain;
     charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Sorry for the bandwidth, but does anyone have Randy's email address? I lost my HD and haven't seen him here in some time.

Thanks,

73 de Pete WA5JCI EM 21

6 Meters WAC - WAS #490 - VUCC #361/634 grids - DXCC/91

2 Meters 36 States - VUCC # 346

Message-ID: <36AFD48A.46715FFC@bw.webex.net>
Date: Wed, 27 Jan 1999 22:07:54 -0500
From: Al Klase <skywaves@bw.webex.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: E. H. Scott SLRM info needed
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Meir and the group,

Riders, Vol. XVIII has complete documents for the Scott Export Receiver. I beleive this was the post-war "civilian" version of the SLR-M. That's the easy part.

The schematic shows two 6-8 Volt .25 Amp (#44) pilot lights, while the parts list calls out 6-8 Volt .15 Amp (#47). I suspect the right answer is 47. The lamps are in a .3 Amp heater string containing 25Z6, 2 X 25L6, 2 x 12SN7, and a 6K7 for a total of 106 volts. There's a 50 ohm resistor at the end of the string. The two series pilot lamps in series with a 10 ohm resistor are in parallel with the 50 ohm unit. YOU DO THE MATH!

73,
Al

WF2U wrote:
>
> Greetings to all,
>
> The initial visual inspection of my newly acquired SLRM revealed that the
> dial lamp is burned out. Since I don't have the manual yet, I don't know
> which tube filament string it's part of, the receiver being a
> transformerless AC/DC set. I also need the lamp specs (lamp No. and/or
> voltage and current rating.)
> I'd also like to know where I can get a manual copy for the radio (I

> checked the on-line catalogs of the well known manual vendors and none of
> them had the SLRM on the list).
>
>

--
Al Klase - N3FRQ
skywaves@bw.webex.net
Flemington, NJ 08822
Web Page: http://www.webex.net/~skywaves/home.htm

From: hikrbikr@erols.com
Message-ID: <36AFAABB.58A2@erols.com>
Date: Thu, 28 Jan 1999 00:09:31 +0000
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: HMS Tyler
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Ahoy! I'm a little behind on reading my BA digests and noticed a message wondering about a WW2 ship/station name "HMS Tyler" stenciled on a US-made BA. Didn't see a response in subsequent digests, so I went looking for HMS Tyler in my copy of British and Dominion Warships of World War II, by Lenton & Colledge, London, 1964, and purchased when I was an ensign, USN in 1969.

HMS Tyler was a Royal Navy frigate, hull number K.576, ex-US DE-567 (destroyer escort), built at by Bethlehem Steel in the USA, launched 20 Nov 1943, and returned to the US Navy on 12 Nov 1945. That would explain why she had USN radio gear with British stencils that ended up in the USA and not UK.

HMS Tyler was a Captain-class frigate, a tough little warship of 1,300 tons, 306 feet long. She was driven by two electric motors powered by generators turned by steam turbines. Top speed 26 knots. Main armament was three 3 inch guns. She also had an assortment of lighter AA guns and probably a large load of depth charges. My book has a photo of a sistership, HMS Hargood, that shows a single funnel amidships and a tall pole mast abaft the bridge structure.

HMS Tyler was probably used for convoy escort in the last stages of the Battle of the Atlantic against the German U-boats. The book lists 46 ships of the class, of which two are listed as lost (i.e., sunk). All the others were probably scrapped or scuttled or expended as targets long ago, although one or two might still be in existence in a far corner of the world.

73, Mike Steussy AE4R
Lieutenant Commander, USN (Ret.)

Message-ID: <36AFF70A.9C1FA409@ix.netcom.com>
Date: Wed, 27 Jan 1999 23:35:06 -0600
From: David Stinson <arc5@ix.netcom.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: 600 Meters- Where's the Surplus?
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

With all the ships and shore stations abandoning 600 meters, there ought to be some surplus longwave gear in the salvage yards around major ports. I for one would be interested in some of this gear. Can you folks near the big ponds make a phone call or two and see if anything is making it to the yards?
Or is it all going to live with Davy Jones?
Probably some minion of our felonious president will think it para-military and have it smashed, but we can ask.

For that matter-- how about the surplus transmitters/keys etc.
from the shore stations?? Someone's got to carry the fire.

And Phil:
I'm gonna keep two of them big beautiful Marconi ship-to-shore transmitters!
You better come get the other four before I get even more sentimental ;-).

73 DE Dave Stinson AB5S
arc5@ix.netcom.com

Message-ID: <36AFF914.B8537636@idirect.com>
Date: Thu, 28 Jan 1999 00:43:48 -0500
From: Jerry Proc <jproc@idirect.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Battery on Concrete?
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi Group,

I'm doing some load tests on a used, maintenance-free car battery in order to see if it's suitable for use as a BA power source. A friend to mine told me not to store the battery on a concrete floor or metal surface, otherwise it looses its charge quite rapidly. Placing a 1/4 inch thickness of wood between the battery and the concrete is all that it takes to prevent the discharge from happening. I've never heard of this before yet this is supposed to be common knowledge in the battery trade.

What happening in the battery when it snuggles up against concrete or metal?

--

Regards,
Jerry Proc VE3FAB   jproc@idirect.com
Web: www3.sympatico.ca/hrc/haida
HMCS HAIDA Naval Museum, Toronto Ontario

Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
To: Old Tube Radios <boatanchors@theporch.com>
From: Sandy W5TVW <ebjr@worldnet.att.net>
Subject: Re: The 600m Liberation Army (SMLA) (fwd)
Message-Id: <19990128061320.FQTZ13682@LOCALNAME>
Date: Thu, 28 Jan 1999 06:13:20 +0000

At 06:18 PM 1/27/99 -1000, you wrote:
>

>Subject: The 600m Liberation Army (SMLA)
>
>Hi guys,
>I remember the discussion we had with Bob about sending a proposal to
>the FCC/ITU/ARRL requesting that the 600m band being given to amateurs
>after maritime use of it is completely finished.
>
>I suggested to Conard and Bob that the concept of 500 kHz being a calling
>freq'y be retained; any interested hams would hang out on 500 - short
>CQs or station-to-station calls would take place on that freq'y -
>stations would QSY to a working freq'y after contact on 500 was
>established. (No amateur band really has a calling freq'y contained
>within it which all hams awaiting QSOs would monitor - this would be
>a very new concept!).
>
>In keeping with the long tradition of silent periods (minutes 15 to 18,

>and minutes 45 to 48), hams also would be asked to observe them, in
>memory of all wireless operators who've perished at sea.
>
>The band runs from 405 to 515 kc. Bob thought this proposal was a
>waste of time due to some marine digital activity around 510 or so.
>Hams are very good about staying within their assigned band limits on
>other bands so I don't see why there should be any more of a concern here.
>
>So, we need to do a careful and detailed write-up of this proposal
>(mentioning that hams and mariners once shared this wavelength
>[not in complete harmony, though]) and it would be a fitting
>tribute to all mariners that hams be given the honor of once
>again becoming residents of this sacred and hallowed band.
>
>Wadaya think, boys?
>
>Jeff
>

Sounds good to me. I'd bet 500 would be the upper limit. There are
some telex broadcasts on 518 Khz (NAVTEX), so I'd imagine they want a
"guard band" around that as it is part of the GMDSS system. They are shutting
down a lot of beacons around 300 khz that used to be used by ships.
Also the aeronautical NDB's are being shut down as well in the 200-400 Khz
band. The lowest ship frequency was 410 Khz and the highest was
512 khz. I'd bet a good place to ask for would be say 425-500 Khz.
Usually you can build a pretty stable oscillator on this band without crystals.
The only trick to the tank circuits is getting hold of some large Litzendraht
wire for the variometers. Most MF transmitter use variometers and NOT
variable caps. The tuning range is greater.
For "harmony" with the BC band listeners, it would be wise to stay away
from say 445-465 Khz region to prevent BCI to IF stages in radios that
tune the 530-1700 AM band! At least in an urban area.
73,
Sandy W5TVW

To: Old Tube Radios <boatanchors@theporch.com>
Cc: boatanchors@theporch.com
Date: Thu, 28 Jan 1999 00:18:47 CST
Subject: Re: Battery on Concrete?
Message-ID: <19990128.001858.10334.2.jackiv@juno.com>
From: John M Iverson <jackiv@juno.com>

nothing happens. the cool concrete in frgid climes will lower the temp
of the battery and reduce its capacity. when it warms up its all there.
jack (old battery tester)
Jack Iverson   K0EWU   jackiv@juno.com
ARRL, IEEE LM, RCA, AMI, ARCI, QCWA

On Thu, 28 Jan 1999 00:43:48 -0500 Jerry Proc <jproc@idirect.com> writes:
>Hi Group,
>
>I'm doing some load tests on a used, maintenance-free car battery in
>order to see if it's suitable for use as a BA power source. A friend
>to
>mine told me not to store the battery on a concrete floor or metal
>surface, otherwise it looses its charge quite rapidly. Placing a 1/4
>inch thickness of wood between the battery and the concrete is all
>that
>it takes to prevent the discharge from happening. I've never heard of
>this before yet this is supposed to be common knowledge in the battery
>trade.
>
>What happening in the battery when it snuggles up against concrete or
>metal?
>
>--
>
>Regards,
>Jerry Proc VE3FAB   jproc@idirect.com
>Web: www3.sympatico.ca/hrc/haida
>HMCS HAIDA Naval Museum, Toronto Ontario
>
>

____
You don't need to buy Internet access to use free Internet e-mail.
Get completely free e-mail from Juno at http://www.juno.com/getjuno.html
or call Juno at (800) 654-JUNO [654-5866]

Message-ID: <36B01267.4B5C63F0@ptld.uswest.net>
Date: Wed, 27 Jan 1999 23:31:51 -0800
From: John R Bookout K7JB <k7jb@uswest.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Battery on Concrete?
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi John:

I have heard the same story about not leaving a car battery on concrete. I never did try it, because no one wants to deliberately set out to destroy a battery. However, the worse thing anyone can do to a

car battery is not charge it and if it is sitting on the concrete floor,
it may very well be out of service and the reason why it fails is
because it is not being charged!

73's John

John M Iverson wrote:
>
> nothing happens. the cool concrete in frgid climes will lower the temp
> of the battery and reduce its capacity. when it warms up its all there.
> jack (old battery tester)
> Jack Iverson   K0EWU   jackiv@juno.com
> ARRL, IEEE LM, RCA, AMI, ARCI, QCWA
>
> On Thu, 28 Jan 1999 00:43:48 -0500 Jerry Proc <jproc@idirect.com> writes:
> >Hi Group,
> >
> >I'm doing some load tests on a used, maintenance-free car battery in
> >order to see if it's suitable for use as a BA power source. A friend
> >to
> >mine told me not to store the battery on a concrete floor or metal
> >surface, otherwise it looses its charge quite rapidly. Placing a 1/4
> >inch thickness of wood between the battery and the concrete is all
> >that
> >it takes to prevent the discharge from happening. I've never heard of
> >this before yet this is supposed to be common knowledge in the battery
> >trade.
> >
> >What happening in the battery when it snuggles up against concrete or
> >metal?
> >
> >--
> >
> >Regards,
> >Jerry Proc VE3FAB   jproc@idirect.com
> >Web: www3.sympatico.ca/hrc/haida
> >HMCS HAIDA Naval Museum, Toronto Ontario
> >
> >
>
> ____
> You don't need to buy Internet access to use free Internet e-mail.
> Get completely free e-mail from Juno at http://www.juno.com/getjuno.html
> or call Juno at (800) 654-JUNO [654-5866]

--
Best 73's

[K7JB is looking for a 30S1 for his Collins S-line station.]

John K7JB

Date: Thu, 28 Jan 1999 01:30:18 -0600 (CST)
From: Bill Hawkins <bill@iaxs.net>
Message-Id: <199901280730.BAA17209@citrus.iaxs.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Battery on Concrete?

Jerry,

Think Jack Iverson's right, it's a decrease in capacity with temperature, not a loss of charge. Warm it up, and it would be OK. A quarter inch of wood isn't much insulation, though.

Is your friend an audiophile? They do some very inventive extensions to the laws of physics...

Regards,
Bill Hawkins

From: zeitler@ibm.net
Message-ID: <010e01be4a94$d908cb40$12292581@km3g>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Triad PR21AL plate xmfr?
Date: Thu, 28 Jan 1999 00:04:32 -0800
MIME-Version: 1.0
Content-Type: text/plain;
    charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Gents,
I am trying to find the data for a Triad model PR21AL plate xmfr. Can anyone tell me the values of the pri. and sec. windings? No sign of this in my 1956 or 1968 Allied Radio catalogs (no they are NOT for sale!!!).

Any info greatly appreciated.

Lane Zeitler
Ku7i

Message-Id: <199901280811.AAA19934@mail-gw3.pacbell.net>
From: "Arden Allen" <gumbear@pacbell.net>
To: Old Tube Radios <boatanchors@theporch.com>

Cc: <boatanchors@theporch.com>
Subject: Re: SLRM (was SB610 xfmr)
Date: Thu, 28 Jan 1999 00:12:20 -0800
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Hi Bob and fellow anchor chain rattlers;

Not powering an SLRM from an isolation transformer is asking for trouble and here is why I say so:

1. Any radio with a power transformer already HAS an isolation transformer (of dubious merit in many cases).

2. The SLRM's floating wiring and chassis mounted components has NUMEROUS oportunities for developing a short to the chassis.

3. A three wire cord is not guaranteed to function to prevent a chassis from becoming electrified.

4. Today's safety engineering standards require that there is sufficient dielectric withstand capability, low enough leakage and safety conscious contruction throughout that a grounded chassis is not necessary for safe usage. A grounded chassis is required to protect from an unusual failure causing the chassis/cabinet to become electrified. Loose parts due to improper servicing or abuse could be an unusual failure; spillage of liquids into the equipment could be an unusual failure; etc.

5. Back in the "bad ol' BA days" safety engineering was not practriced universally and standards, such as they existed, were conveniently ignored.

To sum up, just putting a 3 wire cord on an SLRM is tantamount to adding a fourth leg to a three legged stool made of balsa wood, it is not sound safety engineering. Use a good quality isolation transformer. The best auto insurance is a sober driver and a mechanically sound car.

Sorry if it sounds like a sermon.

Arden Allen KB6NAX Vallejo, CA gumbear@pacbell.net

End of BOATANCHORS Digest 2402
****

>From ???@??? Fri Jan 29 03:14:05 1999
Message-Id: <199901281701.LAA12903@sco.theporch.com>
Date: Thu, 28 Jan 1999 11:01:11 CST
From: Old Tube Radios <boatanchors@theporch.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: BOATANCHORS digest 2403

BOATANCHORS Digest 2403

Topics covered in this issue include:

1) RE: Battery on Concrete?
   by "Jim Berry" <basalop@gte.net>
2) SCR 504 Direction Finder,
   by "Ragnar Otterstad" <otterstad@inet.uni2.dk>
3) TT & Misc FS
   by don merz <71333.144@compuserve.com>
4) Re: Battery on Concrete?
   by Al Klase <skywaves@bw.webex.net>
5) Re: Battery on Concrete?
   by w2ec@VNET.IBM.COM
6) Re: Battery on Concrete?
   by Heinz und Hannelore Breuer <hbreuer@primus-online.de>
7) Wet cells on concrete
   by cswiger <cswiger@wilma.widomaker.com>
8) Wet cell power
   by cswiger <cswiger@wilma.widomaker.com>
9) Re: Battery on Concrete?
   by Bob Roehrig <broehrig@admin.aurora.edu>
10) AUDIO TRANSFORMER PROPERTIES
   by David Stinson <arc5@ix.netcom.com>
11) Galaxy V MKIII Info needed
   by "Lamb, Charles E MD (IndSys, SalemVA)" <Charles.Lamb@indsys.ge.com>
12) Re: E. H. Scott SLRM info needed
   by "Ken Kinderman" <bc455@hotmail.com>
13) Re: E. H. Scott SLRM info needed
   by "Ken Kinderman" <bc455@hotmail.com>
14) Re: AUDIO TRANSFORMER PROPERTIES
   by Al Klase <skywaves@bw.webex.net>
15) Re: Battery on concrete
   by Andre Guibert <aguibert@sympatico.ca>
16) Re: SLRM (was SB610 xfmr)
   by "Ken Kinderman" <bc455@hotmail.com>
17) Re: AUDIO TRANSFORMER PROPERTIES
   by "Roberta J. Barmore" <rbarmore@indy.net>
18) Re: AUDIO TRANSFORMER PROPERTIES
   by John Shriver <jas@shiva.com>

```
 19) Re: Battery on Concrete?
     by Jerry Proc <jproc@idirect.com>

----------------------------------------------------------------------
From: "Jim Berry" <basalop@gte.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: RE: Battery on Concrete?
Date: Thu, 28 Jan 1999 00:50:06 -0800
Message-ID: <002e01be4a9b$33f604e0$7044fdd0@default>
MIME-Version: 1.0
Content-Type: text/plain;
     charset="iso-8859-1"
Content-Transfer-Encoding: 7bit
```

Nothing. There is an old wives tale of some sorts still floating around about not placing a car battery on concrete. For years I have been trying to figure out how it got started. Maybe someone can solve the mystery. I sure would like to know.

My favorite rig is my old TCS running on a 12 volt car battery. Just love the sound of the dynamotors humming along.

73 Jim K7SLI

```
> What happening in the battery when it snuggles up against concrete or
> metal?
>
> --
>
> Regards,
> Jerry Proc VE3FAB   jproc@idirect.com
> Web:      www3.sympatico.ca/hrc/haida
> HMCS HAIDA Naval Museum, Toronto Ontario
>
```

```
------------------------------
Message-ID: <024501be4aaf$66083a20$0300a8c0@cyber>
From: "Ragnar Otterstad" <otterstad@inet.uni2.dk>
To: Old Tube Radios <boatanchors@theporch.com>
Cc: <vgreunke@bigfoot.com>
Subject: SCR 504 Direction Finder,
Date: Thu, 28 Jan 1999 11:42:14 +0100
MIME-Version: 1.0
Content-Type: text/plain;
     charset="iso-8859-1"
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit
```

I have a manual for the portable WW2 DF set SCR 504. Anybody interested ?

73 Rag

Date: Thu, 28 Jan 1999 06:43:09 -0500
From: don merz <71333.144@compuserve.com>
Subject: TT & Misc FS
To: Old Tube Radios <boatanchors@theporch.com>
Message-ID: <199901280647_MC2-683B-3951@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: 7bit
Content-Type: text/plain; charset=us-ascii
Content-Disposition: inline

Teletype And BA Gear For Sale or Trade

CONTACT: Don Merz, N3RHT: 47 Hazel Drive, Mt. Lebanon, PA 15228.
71333.144@compuserve.com

The Teletype stuff is heavy so shipping will likely cost more than the purchase.

Teletype Model 28 Typing Reperforator without keyboard. Cute little thing in flip-top cabinet. Has 3-speed gearshift for 60-75-100 speed. Complete. Mechanism looks fine and seems to work when rotated by hand. But I did not apply power. Cabinet is missing Teletype logo and has a hole in clear plexiglas. Still pretty neat. Easily shippable. $10

Teletype MXD Multiple Transmitter Distributor and base. This is military issue and has a bunch of military tags on it. But it is just a standard, 3-head transmitter-distributor. All 3 heads are driven by a common motor and gear shaft. Each head pops out for servicing. One head can act as a control head to start and stop the other two heads. The control head reads the messages being sent by the other heads and if it sees a proper character sequence it shuts down the active head and starts the other one--it's more complex than that and I'm not describing it well but you get the idea. This MXD is dirty but in excellent condition. It's complete and unmodified and comes with an original manual dated August, 1944 plus a stack of manual updates dated up through 1957. $15

Another Teletype MXD. This looks like it has been modified so that each head can be manually switched on and off using toggle switches. Phone jacks have also been added to take signal from each head separately. It's missing the shaft cover and one motor side cover but is otherwise intact and appears to be in good shape. I don't think this was a Teletype mod--more likely some enterprising ham did this. As-is. $5

Brand new Teletype Model 33 plastic top covers. I have 2 of these new-in-the-box. Teletype part 181900 Cover, dated 1978. This is the molded plastic top cover that includes the paper roll space and comes all the way up to the front panel with cutouts for the Model 28 keyboard and type basket to poke through. Two to sell. $10 each.

Teletype Model 35 Plastic cover. This used but in nice shape. The clear plastic dome on top is intact with no cracks or damage. This is for a KSR because it has the keyboard cutout. $10

Teletype Parts Manual for High Speed Tape Reader Set (CX). Bulletin 1176B. Free for $3 1st class postage.

Teletype Model 31 Operation and Maintenace Manual photocopy. Dated October 3, 1957. With wiring diagrams and parts drawings. $9 PPD

Teletype Model 35 Documentation: This is a complete set of color brochures on the Model 35 line plus another Bell System TWX brochure set that also features the Model 35 line on individual spec sheets. BUT WAIT--THERE'S MORE!: Also includes a "Bell System Model 35 Controlmatic Teletypewriter Programming Manual" and four Model 35 wiring diagrams. Everything is 8-1/2x11 format or larger. $17 PPD/all

Manual: Intertel 201 Series Modems. Undated but I'm guessing mid-1970's. Free for $2 1st class postage.

Mainline scrapbook. Someone collected articles from Ham Radio magazine and elsewhere. These cover the following Mainline models: ST-5, ST-6, XB-6, UT-4 and UT-2. Free for $2 1st class postage.

AT&T Manual: "How To Operate The No. 28 Automatic Send-Receive Teletypewriter On Private Line Service." Dated 1961. Green cover. Bell System logo on back cover. 57 pages. Lots of photos and practical troubleshooting info. $9 PPD

Military TM 11-2225 "Teletypewriter Set AN/GGC, Teletypewriter Reperforator-Transmitters TT-76/GGC and TT-76A/GGC." Dated 1957. This 300-page manual covers a Kleinschmidt ASR set which I have never seen in the flesh. Good condition. $11 PPD

Teletype Automatic Alarm Reporting System. This is a Bell System functional design for an automated alarm system using Model 28 KSR machines in private line service. Dated 1957. In poor condition. I'm not sure why anyone would want this but I didn't want to just pitch it. Free for $2 1st class postage.

Telecon Indutries "Teletype Data Handbook." Very basic 21-page intro to 5-level and 8-level teletype code and complexities like distorrtion. Undated but likely to be late 1970's. Good condition. $6 PPD

Western Union Telefax chassis 6499-A (also marked 6500). This is actually two units, one with the FAX mechanics on it and some electronics, while the other is marked "Regulator/Inverter" and has only electronics on it. Cables link the two chassis. Both units are made by J. P. Seeburg. This unit is written up in the FAX section of the ARRL Specialized Communication Techniques book. It has obviously been modified with switches and controls for ham use. But it appears to be all there and in great shape. There is no cabinet--just 2 chassis with electronics and mechanics exposed. As-is. Untested. $20

 CONTACT: Don Merz, 47 Hazel Drive, Mt. Lebanon, PA 15228
Internet: 71333.144@compuserve.com

Message-ID: <36B05F46.81641A49@bw.webex.net>
Date: Thu, 28 Jan 1999 07:59:50 -0500
From: Al Klase <skywaves@bw.webex.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Battery on Concrete?
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Anchorites,

This is a persistent old wives tale with motor heads. I wonder if there was ever a factual basis for it.

73,
Al

Bill Hawkins wrote:
>
> Jerry,
>
> Think Jack Iverson's right, it's a decrease in capacity with temperature,
> not a loss of charge. Warm it up, and it would be OK. A quarter inch of
> wood isn't much insulation, though.
>
> Is your friend an audiophile? They do some very inventive extensions to
> the laws of physics...
>
> Regards,
> Bill Hawkins

--
Al Klase - N3FRQ
skywaves@bw.webex.net
Flemington, NJ 08822
Web Page: http://www.webex.net/~skywaves/home.htm

From: w2ec@VNET.IBM.COM
Message-Id: <199901281329.HAA10970@sco.theporch.com>
Date: Thu, 28 Jan 99 08:18:10 EST
To: Old Tube Radios <boatanchors@theporch.com>

Subject: Re: Battery on Concrete?

As a motorhead, I think I have a very good idea where it came from. Try this experiment. Take an old battery out of a car. As someone pointed out, old batteries are probably already marginal so they are starting out on the wrong foot. Then place the battery on the concrete floor of an old garage where the temperature changes daily (gets cold during the night, warms up during the day when the crew comes into work). Watch what happens to the base of the battery. Over a period of time you will see many white tendrils form a spiderweb-like connection between the floor and the battery. Looks a little like the corrosion that forms at the terminals of the battery if they aren't maintained. When the mechanic trys to reuse the battery, it's weak (it probably started weak, remember?) and he draws the conclusion that the charge has leaked out thru the little white "corrosion" into the concrete floor.

What it actually is, is just the calcium byproducts leaching out of the concrete due to the constant temperature cycles that attaches itself to the battery bottom. Since it looks like corrosion, the obvious (but incorrect) conclusion is that the charge is leaking out into the concrete.

Anybody seen the white powdery substance on concrete floors that I'm talking about? I keep my batteries on a board, but only to keep the calcium off the battery base.

73, Ray W2EC

==
Paul R. (Ray) Vasek, Apalachin, NY   BMWCCA #449 AC Owners Club #1392

1972 BMW 2002, 1972 BMW Bavaria, 1980 BMW 633CSi
1957 AC Ace, 1957 AC Aceca Bristol
1964 MGB Roadster

visit the AC Cars homepage at: www.geocities.com/~ac_cars/

Message-ID: <36B064A1.57C9@primus-online.de>
Date: Thu, 28 Jan 1999 14:22:59 +0100
From: Heinz und Hannelore Breuer <hbreuer@primus-online.de>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Battery on Concrete?
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

It is true if a black cat cross your way from the left
in a moonless night... But you can save the battery if
you kill the cat with a silver bullet and cook it for
7 hours in red wine and garlic.

73
Heinz - KF6FNC

PS: Maybe Nolan can tell us how to cook a cat properly

Al Klase wrote:
>
> Anchorites,
>
>   This is a persistent old wives tale with motor heads. I wonder if
> there was ever a factual basis for it.
>
> 73,
> Al
>
> Bill Hawkins wrote:
> >
> > Jerry,
> >
> > Think Jack Iverson's right, it's a decrease in capacity with temperature,
> > not a loss of charge. Warm it up, and it would be OK. A quarter inch of
> > wood isn't much insulation, though.
> >
> > Is your friend an audiophile? They do some very inventive extensions to
> > the laws of physics...
> >
> > Regards,
> > Bill Hawkins
>
> --
> Al Klase - N3FRQ
> skywaves@bw.webex.net
> Flemington, NJ 08822
> Web Page: http://www.webex.net/~skywaves/home.htm

Date: Thu, 28 Jan 1999 08:43:10 -0500 (EST)
From: cswiger <cswiger@wilma.widomaker.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Wet cells on concrete
Message-ID: <Pine.BSF.3.96.990128084006.9760A-100000@wilma.widomaker.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

>   This is a persistent old wives tale with motor heads. I wonder if

>there was ever a factual basis for it.
>
>> Think Jack Iverson's right, it's a decrease in capacity with
>> temperature, not a loss of charge. Warm it up, and it would be OK.

Ah, putting your 'A' battery (ba tie in) on a concrete floor, maybe
people think the 'lime' or other alkali in it will neutralize the
h2so4. Don't beleive it myself, but all cells fail eventually so
who's to say if it's cause & effect or mere coincidence. The brain
accepts evidence that supports it's beliefs, however irrational,
and rejects evidence that contradicts it.

Chuck
kb4new
cswiger@widomaker.com

Date: Thu, 28 Jan 1999 08:58:18 -0500 (EST)
From: cswiger <cswiger@wilma.widomaker.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Wet cell power
Message-ID: <Pine.BSF.3.96.990128085716.12284A-100000@wilma.widomaker.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

>I'm doing some load tests on a used, maintenance-free car battery in
>order to see if it's suitable for use as a BA power source. A friend to
>mine told me not to store the battery on a concrete floor or metal

Oh, I didn't read the original message - the main issue here is
actually the type of duty the battery will see. Car ignition
batteries are designed for short blasts of intense current, like
"600 cold cranking amps". It will work somewhat for BA use, but
it is preferable to use a "deep discharge marine" battery.
Another issue is the voltage - using a 6-cell battery will get you
12Vdc, but you won't get maximum output from some squalid state
amplifiers if they expect to see 13.8Vdc, they will saturate at
a lower power.

Chuck
kb4new
cswiger@widomaker.com

Date: Thu, 28 Jan 1999 08:10:16 -0600 (CST)
From: Bob Roehrig <broehrig@admin.aurora.edu>
To: Old Tube Radios <boatanchors@theporch.com>
cc: Old Tube Radios <boatanchors@theporch.com>

Subject: Re: Battery on Concrete?
Message-ID: <Pine.ULT.3.96.990128080919.18909A-100000@admin.aurora.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Thu, 28 Jan 1999, Jerry Proc wrote:

> told me not to store the battery on a concrete floor or metal surface, otherwise it looses its charge quite rapidly. Placing a 1/4 inch thickness of wood between the battery and the concrete is all that it takes to prevent the discharge from happening.

Yes, it's true. I have no idea why, but it happened to me.

"Nostalgia is a thing of the past"
E-mail broehrig@admin.aurora.edu 73 de Bob, K9EUI
CIS: Data / Telecom Aurora University, Aurora, IL
630-844-4898 Fax 630-844-5530

Message-ID: <36B07183.67A54EA9@ix.netcom.com>
Date: Thu, 28 Jan 1999 08:17:40 -0600
From: David Stinson <arc5@ix.netcom.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: AUDIO TRANSFORMER PROPERTIES
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I just know there's an expert out there;

What makes an audio or modulation transformer a "good" one?
What properties make one transformer have a wide, flat response over the audio spectrum and others top-out at 3KC, or bottom at 400?

If I asked this in some other forums I'd hear about how you've got to shake a black chicken feather on the dark of the moon while chanting "hail, Jehosiphat!" but I'm betting I'll get a straight answer here :-).

73 DE Dave Stinson AB5S
arc5@ix.netcom.com

Message-ID: <ED376DB16DFFD01189E700805F1961B501A24919@vasale02misge.salem.ge.com>
From: "Lamb, Charles E MD (IndSys, SalemVA)" <Charles.Lamb@indsys.ge.com>
To: Old Tube Radios <boatanchors@theporch.com>
Cc: "'VSS list posting address'" <VSS@LISTSERV.TEMPE.GOV>

Subject: Galaxy V MKIII Info needed
Date: Thu, 28 Jan 1999 09:37:44 -0500

Colleagues,

I recently picked up this fine transceiver which was reported to be working fine, but has some difficulties. The manual I have is actually for a GT550 - quite similar, but with some fundamental differences. In addition, I picked up the station console/speaker/clock/phone patch/ SWR bridge accessory which has no documentation. Does anyone have a schematic or even better a manual on one or both of these? Reasonable costs cheerfully reimbursed.

Regards,

Charles
WD4KZK
<Charles.Lamb@indsys.ge.com>

Message-ID: <19990128150807.11274.qmail@hotmail.com>
From: "Ken Kinderman" <bc455@hotmail.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: E. H. Scott SLRM info needed
Date: Thu, 28 Jan 1999 07:08:07 PST
Mime-Version: 1.0
Content-Type: text/plain

newly acquired SLRM revealed that the
>dial lamp is burned out. I don't know
>which tube filament string it's part of

Actually, the dial lamp is connected at the bottom end of the power supply output filter cap (2x60 mf.in parallel) which accounts for the slow light-up.

The manual says only "6-8 volts, 0.15 A miniature bayonet base". Sounds like a 40A, or old faithful, a 47.

>manual copy for the radio

Send me your address, I'll send you a spare xerox that I have.

73,

Ken Kinderman
WB9OZR
bc455@hotmail.com

____
Get Your Private, Free Email at http://www.hotmail.com

Message-ID: <19990128151648.21437.qmail@hotmail.com>
From: "Ken Kinderman" <bc455@hotmail.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: E. H. Scott SLRM info needed
Date: Thu, 28 Jan 1999 07:16:47 PST
Mime-Version: 1.0
Content-Type: text/plain

Al & group:

> The schematic shows two 6-8 Volt .25 Amp (#44) pilot lights, while
>the parts list calls out 6-8 Volt .15 Amp (#47)

>lamps are in a .3 Amp heater string containing 25Z6, 2 X
>25L6, 2 x 12SN7, and a 6K7 for a total of 106 volts. There's a 50 ohm
resistor at the end of the string.

Very interesting.. the "export version" must be a slightly different
radio! My manual shows only one lamp as described in my earlier post,
and nothing but tubes in the filament string. Where else would the
additonal lamps have been used?

73,

Ken Kinderman
WB9OZR
bc455@hotmail.com

____
Get Your Private, Free Email at http://www.hotmail.com

Message-ID: <36B0819C.AB8A5126@bw.webex.net>
Date: Thu, 28 Jan 1999 10:26:20 -0500
From: Al Klase <skywaves@bw.webex.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: Old Tube Radios <boatanchors@theporch.com>

Subject: Re: AUDIO TRANSFORMER PROPERTIES
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Dave & The Group,

There are a number of properties involved, and they all involve money and weight.

Low end frequency response is controlled by the inductance of the windings. The inductive reactance of the primary needs to be about five times the desired impedance of the circuit. A 20 Hz transformer need 10 times the inductance of a 200 Hz unit. This translates into more turns of wire and possibly expensive core material.

The quest for low-end response can compromise the high frequencies due to distributed capacitance of the winding. I don't now details, but there may have been some elaborate winding schemes to aleviate this. Again proper iron can help my making it easier to acheive the inductance.

High power-handling capability requires heavier wire to hold down resistance, and a greater core cross section to avoid magnetic saturation. Again: More iron and copper!

Audio transformers in boatanchors were generally designed for communications quality audio, 200-4000 Hz. This allowed a considerable cost and weight savings versus the Hi-Fi sort of transformers use in the recording and broadcast industry.

73,
Al

David Stinson wrote:

> I just know there's an expert out there;
>
> What makes an audio or modulation transformer a "good" one?
> What properties make one transformer have a wide, flat response
> over the audio spectrum and others top-out at 3KC, or bottom at 400?

--
Al Klase - N3FRQ
skywaves@bw.webex.net
Flemington, NJ 08822
Web Page: http://www.webex.net/~skywaves/home.htm

Date: Thu, 28 Jan 1999 10:31:34 -0500 (EST)

Message-Id: <199901281531.KAA00189@smtp13.bellglobal.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
To: Old Tube Radios <boatanchors@theporch.com>
From: Andre Guibert <aguibert@sympatico.ca>
Subject: Re: Battery on concrete

Bonjour to All

"Battery on concrete" is a litteral English translation
of a French Quebec phrase often heard in cold spell:

"Ma batterie est a terre", (My battery is dead).

Andre
johanne

Message-ID: <19990128153141.27715.qmail@hotmail.com>
From: "Ken Kinderman" <bc455@hotmail.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: SLRM (was SB610 xfmr)
Date: Thu, 28 Jan 1999 07:31:41 PST
Mime-Version: 1.0
Content-Type: text/plain

Gang;

>2. The SLRM's floating wiring and chassis mounted components has
NUMEROUS
>oportunities for developing a short to the chassis.
>

I have to agree with Arden and revise my earlier post: The line bypass caps are not the only route. Several circuitous (pun) routes exist for one side of the line to reach the chassis. Not worth the BW to describe them. Let's all use a transformer.

BTW, the same holds for the R-100, an AC/DC/Battery/110/220 set.

73,

Ken Kinderman
WB9OZR
bc455@hotmail.com

Get Your Private, Free Email at http://www.hotmail.com

Date: Thu, 28 Jan 1999 10:52:13 -0500 (EST)
From: "Roberta J. Barmore" <rbarmore@indy.net>
To: Old Tube Radios <boatanchors@theporch.com>
cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: AUDIO TRANSFORMER PROPERTIES
Message-ID: <Pine.SUN.3.96.990128102927.1507A-100000@indy3>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi, Dave & the gang!

I'll take a shot at this, though I'm hoping Doc Van Cleef shows up with a *real* explaination. I have a little handle on the broad outline but not the details.

First off, you need to have enough inductance in the windings so the thing doesn't start looking low-Z (compared to source and load) at the low end of the range; likewise, you need enough iron (and the right kind) so it doesn't go into saturation at the low-freq end of the response. Wire must be sized to prevent excessive resistive losses. And HF response if usually limited by the distributed capacitance of the windings--which there are winding tricks to minimize. Best isolation is gained by reducing capacitance *between* the various windings, and that's a function of the "electrostatic shield," usually in the from of a metal-foil overwrap between the winding so insulated as to not form a shorted turn.

1930s ARRL Handbooks have a decent section, mostly on power supply transformers and chokes, that's a good place to start.

That's the hasty handwaving overview. Applying those notions is a whole other thing! They tell me it is not that arcane an art, if you know how, enjoy numbers, and don't expect too much of your mathematical models. But the "tricks of the trade" are many, and not so easily found. The standard texts can give you a running start but there's a lot of fine-tuning guided by practical experience in making a really good transformer.

Me, I buy 'em by brand-name, and have sung the praises of the Thordarson "Tru-Fidelity" line, UTC's "Linear Standard" iron, and modern-day Deane Jensen on the list in the past. It's good stuff, though some (UTC in particular) suffers in price from both small production and the high esteem in which the tube hi-fi lads hold 'em--for once, they're right; you can't fake good iron by taking fast and invoking hype.

There's a JA outfit, name escapes me, that makes *very* fine audio transformers. Prices are about what you'd expect, plus 50% for import costs and the higher prices on those busy islands.

73,
--Bobbi

PS: Looks like I am home sick today, picked up a sinus bug from a visiting satellite tech. And I was tryin' to be *so* careful! Ya just can't win, my desk is stacked six layers deep already. Might try 20 but the basement shack is awfully chilly.

KB9GKX "RJ" rbarmore@indy.net Roberta J. (Bobbi) Barmore
FISTS #3388 * G-QRP #10001 * ARRL * RSGB * WIA
Appreciator Of Vacuum-Tube Ham Gear and Vintage Keys

Date: Thu, 28 Jan 1999 11:06:51 -0500
Message-Id: <199901281606.LAA08385@brill.shiva.com>
From: John Shriver <jas@shiva.com>
To: Old Tube Radios <boatanchors@theporch.com>
CC: boatanchors@theporch.com
Subject: Re: AUDIO TRANSFORMER PROPERTIES

There are well-known properties. Norman Crowhurst wrote many excellent readable yet accurate articles on the subject. (He was a great author in the audio business.)

You want lots of primary inductance, so that you get good low frequency response. That takes copper and iron. Not cheap.

You also need enough iron so that you don't get magnetic saturation at high output power. You also want good iron that stays reasonably linear up to high magnetic flux levels. (The best silicon steel isn't cheap.) It has to be in laminations to prevent eddy currents from eating all your power.

You want low leakage inductance between the primary and secondary. Leakage inductance is basically a way of measuring the flux generated by the primary that doesn't do it's work exciting the secondary.

You need good balance in the primary, assuming push-pull. You also want good tolerance of un-balanced currents in the priamry. (Toroids are really lousy in this respect, since there are no gaps in the laminations, so that they are easy to saturate.)

You need adequate current handling in the primary.

You want a reasonably well-behaved HF rolloff, without wild phase shifts. This allows you to get stable negative feedback around the transformer without having to rolloff the HF too much.

The problem is that for a given primary inductance and power, there are inexorable tradeoffs between these various desireable properties.

How is this done? Clever sectionalizing and interleaving of the primary and secondary windings. Lots of high quality iron. Clean tight windings with no wasted space. Thinner insulations (we're a lot better off there than 40 years ago!).

Modulation transformers often have the nasty problem of needing (substantial) current flowing in the secondary. That's a real pain, net DC flux in a transformer saturates the core, requiring a large gap, making it much harder to create a design with low leakage inductance.

This is well-discussed in the Radiotron Designers Handbook (4th Ed.). There's a good description of exactly how the "Williamson" power transformer was sectionalized and wound.

Here's a bunch of additional citations, many of which can also be found in the RDH's bibliography:

Crowhurst, Norman H. "How Good is an Audio Transformer?" Audio Engineering 36, no. 3 (March 1952): 20-21, 55-56.

Crowhurst, Norman H. "Measuring up an Audio Transformer." Audio Engineering 36, no. 11 (November 1952): 24-26, 80.

Crowhurst, Norman H. "Audio Transformer Design." Audio Engineering 37, no. 2 (February 1953): 26-27, 46-48.

Ayres, W. R. "Audiology. Output Transformer Design Considerations." Audio Engineering 37, no. 4 (April 1953): 14, 69-70.

Crowhurst, Norman. H. "Output Transformer Design." Audio 40, no. 9 (September 1956): 20-23, 89-94.

Crowhurst, Norman H. "How an Output Transformer Causes Distortion, Part 1." Audio 41, no. 2 (Feburary 1957): 20-22, 75.

Crowhurst, Norman H. "How an Output Transformer Causes Distortion, Part 2." Audio 41, no. 3 (March 1957): 21-23.

Crowhurst, Norman H. "Output Transformer Specifications." Audio 41, no. 6 (June 1957): 20-23, 51-52.

Moir, James. "Output Transformers, Part I." Audio 44, no. 2 (February 1960): 30-32,82.

Moir, James. "Output Transformers, Part II." Audio 44, no. 3 (March 1960): 34-42, 68-69.

Audio Engineering and Audio are available on microfilm. While Audio magazine is still pubished, it hasn't the technical depth and rigor that it had in the 1940-1960 period.

On the web, there's a monograph that appears to come from Jensen transformers (serious company selling microphone transformers) that happens to be on the page of a "high-end" audio company: http://www.jeffrowland.com/tectalk2.htm.

Message-ID: <36B0970A.5052824@idirect.com>
Date: Thu, 28 Jan 1999 11:57:46 -0500
From: Jerry Proc <jproc@idirect.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Battery on Concrete?
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi Folks,

Thanks for the responses. From what I can see, there is nothing scientific here and I would have to conclude that it must be "electrical folklore" at its best. Consider this:

1) Just below the frost line, the temperature of the earth is a constant 58 F, so a basement floor can't be colder than that.
2) Automotive batteries are designed to provide huge amounts of current for short time periods under
cold conditions. Efficiency drops off as the temperature slides below freezing.
3) Assuming my basement floor is 58F worst case, then the battery is exposed to "tropical-like" conditions so it should be in top operating condition at any given moment. Even if stored outside on concrete, the battery should perform exactly in the same manner as if installed in an automobile given the same temperature.
4) The only possible circumstance under which a battery could discharge - if the filling caps were left off and the battery was exposed to an atmosphere of intense concrete dust which would likely neutralize the sulfuric acid in the electrolyte.
5) The only practical reason for placing a battery on a slab of wood is to absorb any potential leakage or splashing of battery electrolyte when

refilling with water .

--

Regards,
Jerry Proc
jproc@idirect.com
Web: http://www3.sympatico.ca/hrc/haida
     http://webhome.idirect.com/~jproc/cta

End of BOATANCHORS Digest 2403
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